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Update

U.S. Department of Energy

Office of Environment, Safety & Health

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Results Demonstrate that Prevention Results in More Safety at Less Cost

DOE officials today released results from major field projects that confirm that a preventive approach to safety will result in more efficient work more safety for workers. and substantial savings for taxpayers. The concept. called Enhanced Work Planning, was discussed with reporters by Assistant Secretary for Environment, Safety and Health Tara O'Toole. M.D. and Assistant Secretary for Environmental Management Al Alm.

"Four years ago we recognized that more than a half century of nuclear weapons production left a legacy of unique and compelling hazards and associated safety challenges that required urgent attention." said Dr. O'Tool. In addition, she said, the nature of work at DOE had changed dramatically -- management of almost one million cubic meters of radioactive waste and materials, dismantlement of more than **7000** contaminated buildings, maintenance of aging and deteriorating facilities, nearly 10,000 individual cleanup challenges, and shrinking budgets.

"It was clear that this would require a different approach to safety -- one that resulted in careful planning of work, careful analysis of the hazards faced by workers, and ways to control hazards once identified." O'Toole said.

One response was the development Enhanced Work Planning. In this approach, all personnel involved in a specific job -- managers, planners. works, safety and health personnel -- work as a team throughout the planning and completion of work, with lessons-learned recycled to other projects. Traditionally at DOE one group would prepare the plan with other specialists separately providing review and comment. Workers were rarely involved. The Department **found** that up to two-thirds of the time invested in work planning was spent moving paper, not doing work

“The key for DOE is to involve the workers and incorporate safety before work begins. not leave it as the last step in a long process or view it as needless paper work.” said Dr. O’Toole. Another important benefit is that worker exposure is now being incorporated into the work planning process, so that health risks to workers can be minimized.

Projects Document Savings, Safety

Enhanced Work Planning began in 1995 as a partnership between DOE’S Office of Environment, Safety and Health and the Office of Environmental Management and its field offices. Projects have been completed at the Fernald Environmental Management Project, the Rocky Flats Environmental Technology Site, the Hanford High-level Waste Tank Farms, PURE.X facility, K-Basins, and B-Plant, the Mound Plant, Pantex Plant, Idaho National Engineering Laboratory, Oak Ridge Reservation, the Savannah River Site, and Los Alamos National Laboratory.

Enhanced Work Planning has been used successfully in a range of activities that include corrective and preventive maintenance, deactivation and decommissioning of facilities, and environmental cleanup and waste minimization. Examples of the results from these projects are contained in the attached fact sheet.

A Template for Safety at Hazardous Work Sites

A second initiative resulting from a partnership between the two DOE offices is the *Handbook for Occupational Health and Safety During Hazardous Waste Activities* officially released today. The Handbook was developed so that the OSHA HAZWOPER (Hazardous Waste Operations and Emergency Response) rule -- a performance-based standard not geared to DOE sites -- could be more readily and cost-effectively applied to DOE’s unique facilities and operations. Lack of clear and consistent guidance to DOE led to confusion and inconsistent performance at cleanup sites. The resulting HAZWOPER Handbook and its companion guides provide managers and workers with a consistent way to safely conduct hazardous waste activities. A draft of the Handbook was field tested in 1995 and 1996 and finalized this June. The field tests already resulted in significant savings by eliminating redundant and inconsistent training.

Additional information on Enhanced Work Planning is available by calling Ed Patigalia at 301903-3972 or via Internet <http://www.eh.doe.gov.wpphm/ewp/ewp2.htm> To receive a copy of the HAZWOPER Handbook, contact Dee Young at 301/03-4435.



**DOE Environment,
Safety & Health Updates**
are issued periodically to
DOE stakeholders with an
interest in protecting the
environment and worker
health and safety at DOE
sites across the nation.

PROJECT RESULTS

The Enhanced Work Planning process establishes clear benchmarks and document results.

Hanford Tank Farms

- 1 Forty percent decrease in recordable injuries,
- 1 Fifty percent reduction in the lost workday case rate
- 1 Fifty percent reduction in skin radiation contamination
- 1 \$1.8 million saved due to streamlining of paperwork.

PUREX Deactivation

- 1 \$800.000 saved by eliminating duplicate requirements
- 1 Six-fold reduction in work suspensions caused by documentation errors.

Fernald

- 1 Two million dollars saved by identifying unnecessary work
- 1 Twenty seven-fold return on costs to implement Enhanced Work Planning with total site-wide savings of \$9.37 million
- 2 Two million hours worked in 1995 without an accident.

Oak Ridge

- 1 Fifty percent reduction in work planning time and 20 percent savings by reducing delays:
- 1 At K-25 alone. 49,000 work hours without a single recordable safety accident and a 6 month early project completion.

Idaho

- 4 Worker accident rates well below the national and DOE averages
- 1 Lost or restricted workday average reduced from 44.5 days to 31.9 days
- 1 Projects are 35 percent ahead of schedule and 6 percent under budget.